

天线测试报告

规格书

客户 CUSTOMER	
客户料号 CUSTOMER NO.	
供方品名 PART NAME	4G/WIFI 天线
规格名称 SUPPLIER NO.	XH220199(R900EU)

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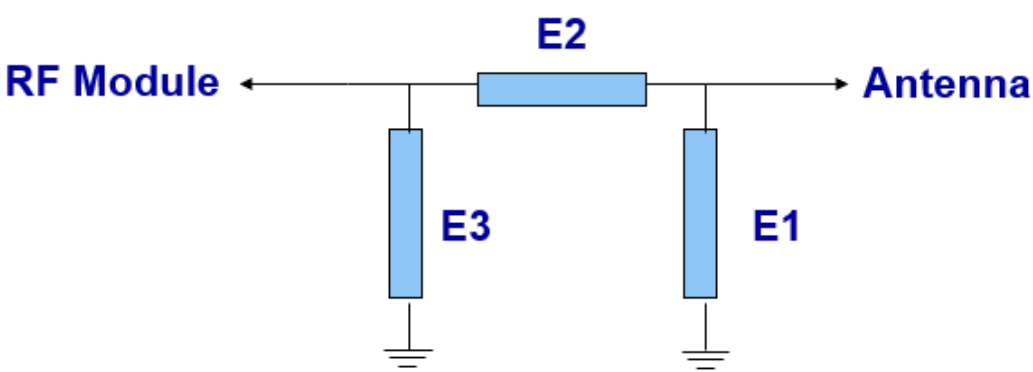
电性测试报告

TEST REPORTS

频率 Frequency	4G(824~960MHz;1710~2690MHz) WIFI(2400~2500MHz)
阻抗 Impedance	50 Ohm Nominal
驻波比 V.S.W.R	≤2.0
回波损耗 Return Loss	-10dB Max
辐射 Radiation	Omni-directional
增益 Gain(Peak)	4G 2.42dBi WIFI 1.87dBi
极化方式 Polarization	Linear,Vertical
功率 Admitted Power	1W
连接器 Connector	/
Physical Properties	
天线材质 Antenna Material	FPC
线材类型 Cable Type	/
工作温度 Operating Temp.	-10-+60℃
存储温度 Storage Temp.	-10-+70℃
线材颜色 Cable Color	Black

匹配电路

Matching Circuits



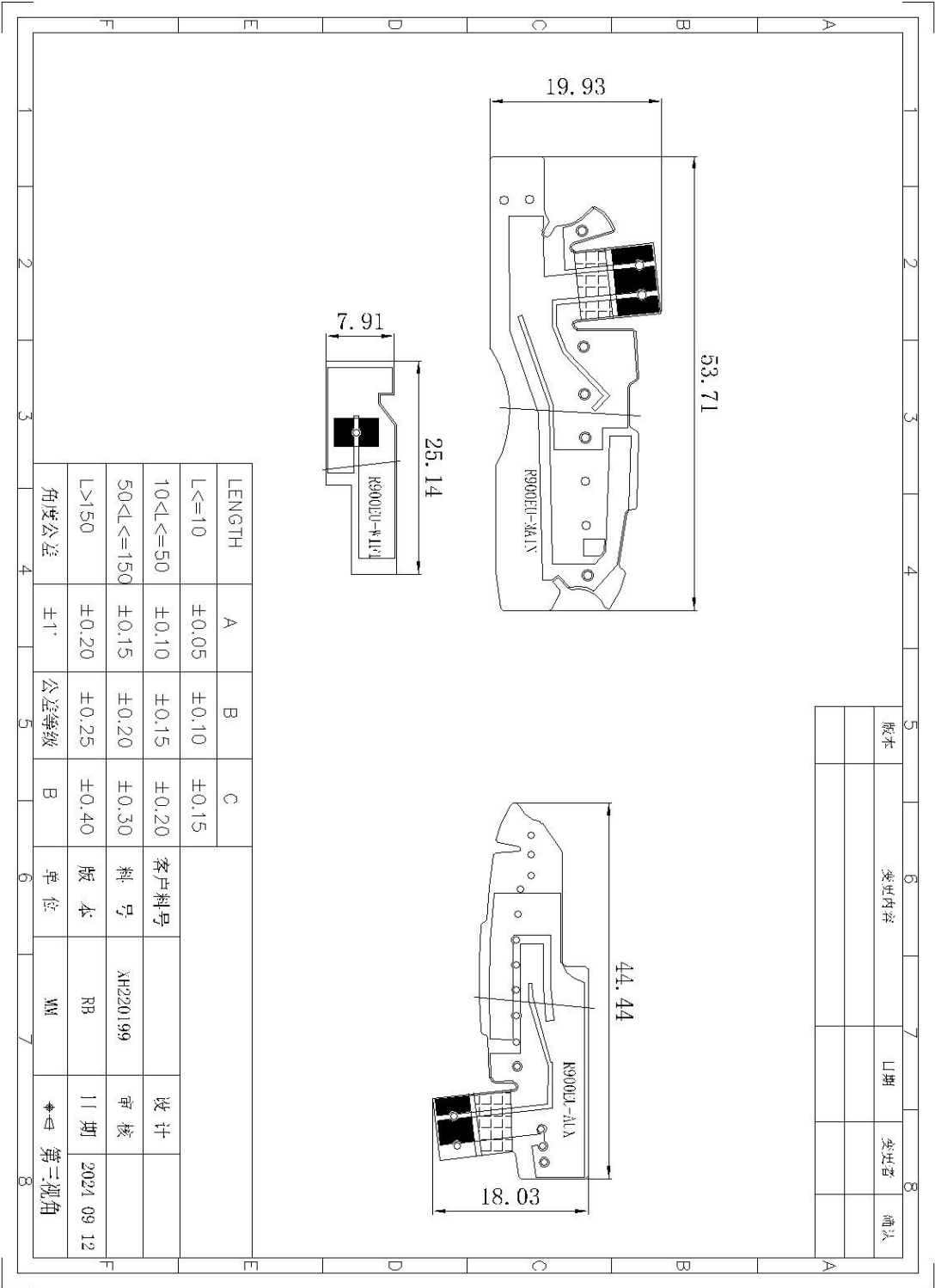
匹配电路 matching circuit:

Element	Value	Vender
E1(0402)	15nH	
E2(0402)	3nH	
E3(0402)		

原匹配电路无修改

The original matching circuit has not been modified

工程图
DRAWING



测试数据

Test Data

LTE-B1	Test	LTE1 TRP			Test	LTE1 TIS
	Result	18050	18300	18550	Result	550
	Frequency (MHz)	1925	1950	1975	Frequency (MHz)	2165
	Txp Ave (dBm)	20.83	19.36	20.59	Sens Ave (dBm)	-93.09
LTE-B3	Test	LTE3 TRP			Test	LTE3 TIS
	Result	19250	19575	19900	Result	1900
	Frequency (MHz)	1715	1747.5	1780	Frequency (MHz)	1875
	Txp Ave (dBm)	17.12	17.43	18.96	Sens Ave (dBm)	-93.27
LTE-B7	Test	LTE7 TRP			Test	LTE7 TIS
	Result	20800	21100	21400	Result	3400
	Frequency (MHz)	2505	2535	2565	Frequency (MHz)	2685
	Txp Ave (dBm)	17.5	17.08	16.55	Sens Ave (dBm)	-90.31
LTE-B8	Test	LTE8 TRP			Test	LTE8 TIS
	Result	21500	21625	21750	Result	3750
	Frequency (MHz)	885	897.5	910	Frequency (MHz)	955
	Txp Ave (dBm)	19.76	18.17	17.46	Sens Ave (dBm)	-92.77
LTE-B20	Test	LTE20 TRP			Test	LTE20 TIS
	Result	24200	24300	24400	Result	6400
	Frequency (MHz)	837	847	857	Frequency (MHz)	816
	Txp Ave (dBm)	16.88	17.59	17.64	Sens Ave (dBm)	-92.75

4G 天线测试效率:

4G antenna testing :

Freq (MHz)	Effi (%)	Gain
820	20.45	-1.64
830	21.15	-2.38
840	24.43	-1.46
850	26.69	-0.74
860	26.49	-0.91
870	27.26	-1.06
880	26.69	-1.64
890	26.92	-0.82
900	28.79	-0.31
910	35.83	0.67
920	37.75	0.75
930	40.94	0.97
940	38.03	0.3
950	35.15	-0.37
960	28.2	-1.62

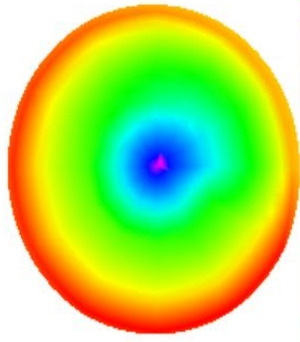
Freq (MHz)	Effi (%)	Gain (dBi)
1710	40.66	0.54
1740	45.38	-0.86
1770	42.07	-0.12
1800	50.57	0.54
1830	46.17	0.32
1860	50.46	1.04
1890	50.4	0.96
1920	54.35	1.13
1950	50.98	0.55
1980	53.48	1.13
2010	58.46	1.7
2040	54.18	1.24
2070	52.57	0.73
2100	50.6	0.44
2130	49.99	0.3
2160	50.29	0.69
2190	51.44	1.29

Freq (MHz)	Effi (%)	Gain (dBi)
2220	53.28	0.96
2250	53.09	1.16
2280	53.46	1.27
2310	55.37	2.42
2340	52.15	0.02
2370	54.94	1.85
2400	53.97	0.77
2430	56.43	1.91
2460	61.01	2.15
2490	63.95	1.86
2520	61.5	1.79
2550	50.29	0.56
2580	56.38	0.67
2610	51.39	1.75
2640	55.13	1.87
2670	47.04	1.61
2700	42.86	0.93

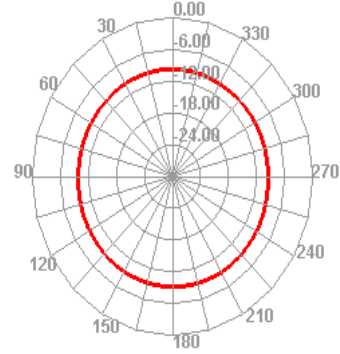
3D 方向图:

3D directional diagram:

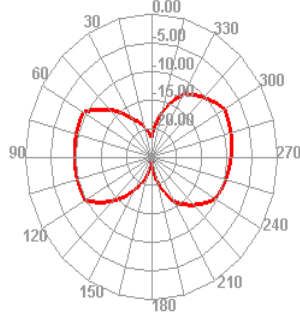
820.000MHz



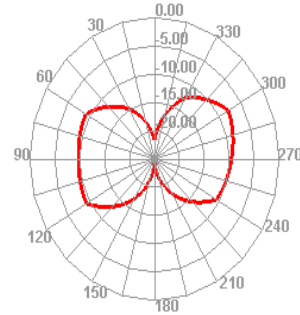
820.000MHz H



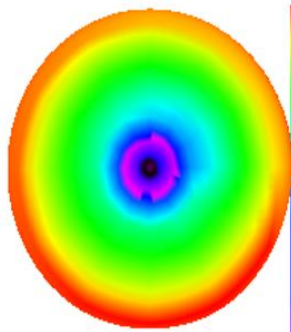
820.000MHz E1



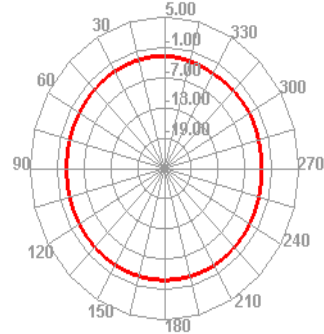
820.000MHz E2



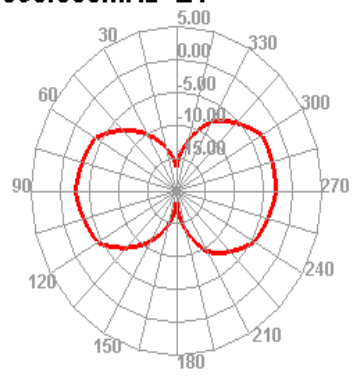
890.000MHz



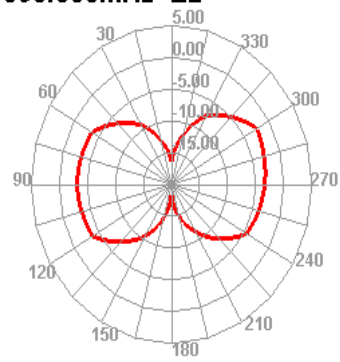
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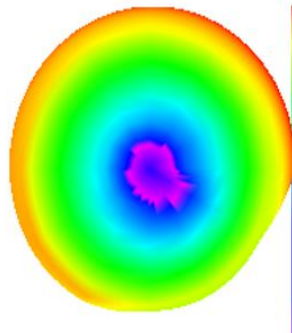
890.000MHz E1



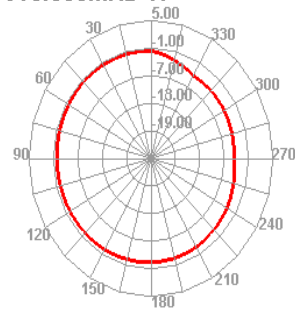
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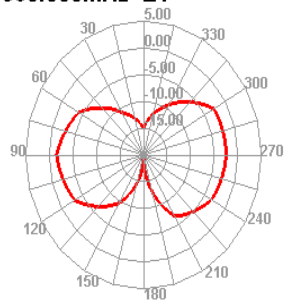
960.000MHz



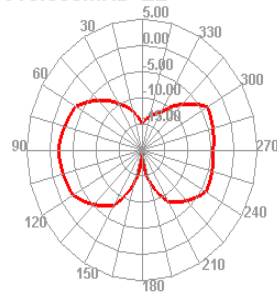
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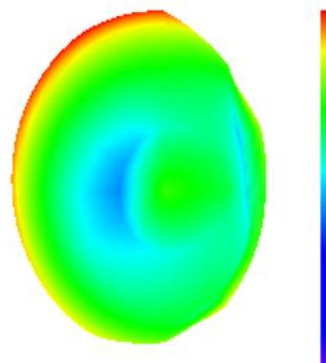
960.000MHz E1



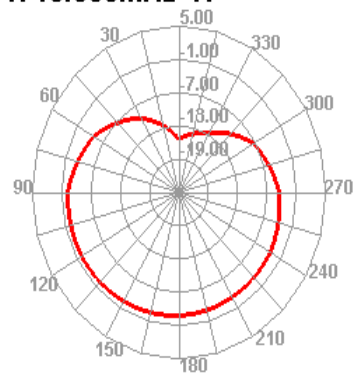
960.000MHz E2



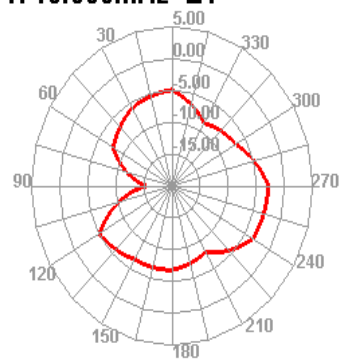
1710.000MHz



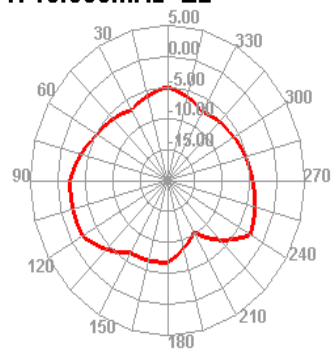
1710.000MHz H



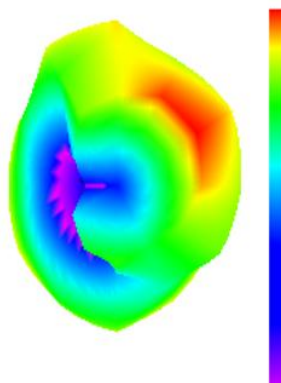
1710.000MHz E1



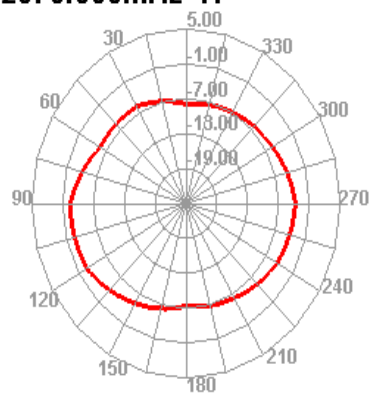
1710.000MHz E2



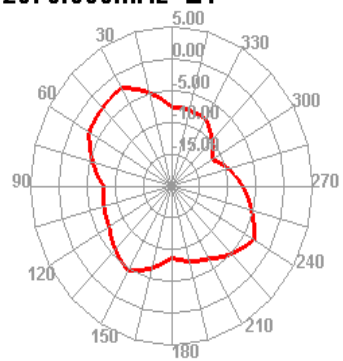
2070.000MHz



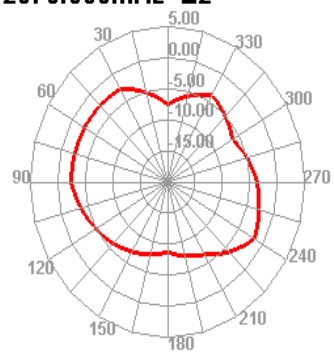
2070.000MHz H



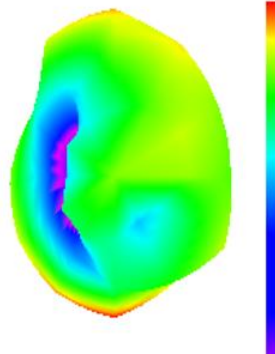
2070.000MHz E1



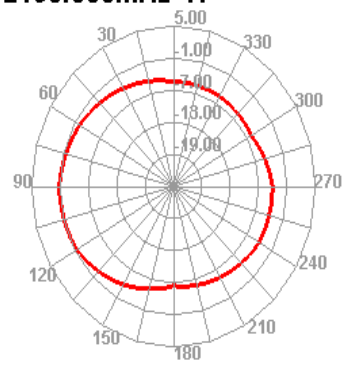
2070.000MHz E2



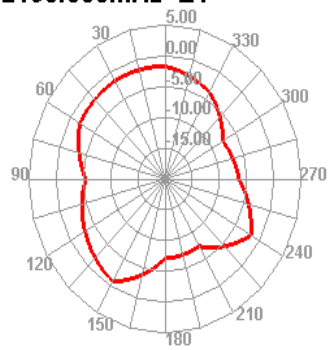
2190.000MHz



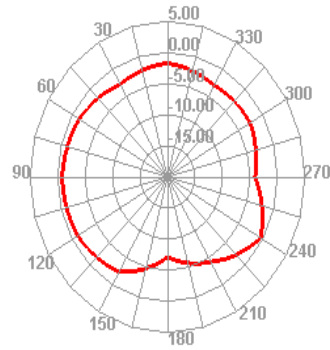
2190.000MHz H



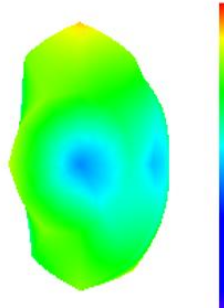
2190.000MHz E1



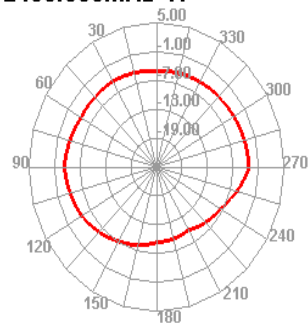
2190.000MHz E2



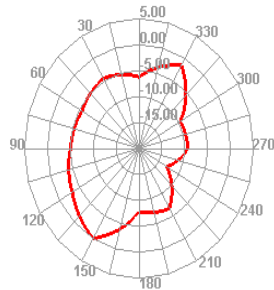
2400.000MHz



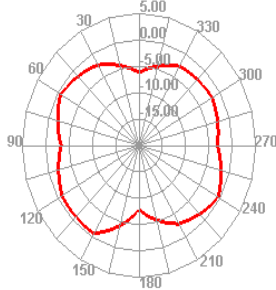
2400.000MHz H



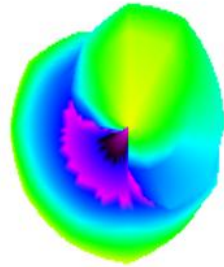
2400.000MHz E1



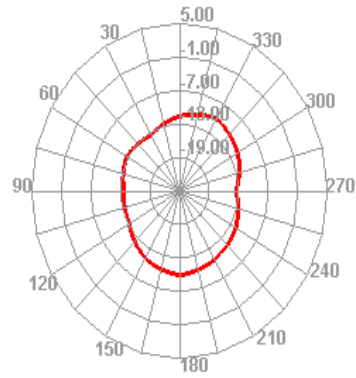
2400.000MHz E2



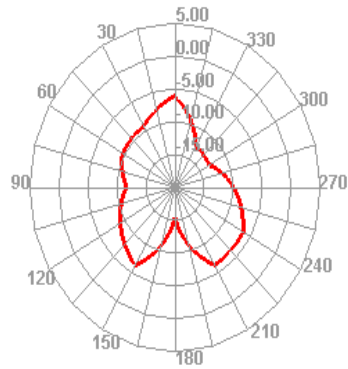
2700.000MHz



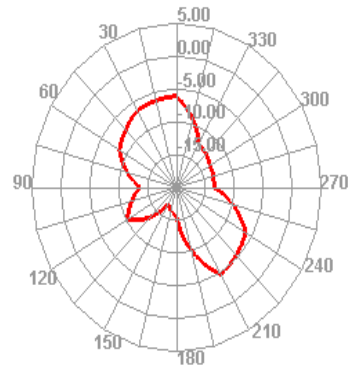
2700.000MHz H



2700.000MHz E1



2700.000MHz E2



WIFI 天线测试效率:

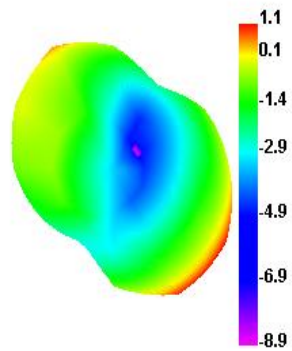
WIFI antenna testing :

Freq (MHz)	Effi (%)	Gain (dBi)
2400	57.79	1.15
2410	53.73	0.77
2420	58.31	1.16
2430	56.01	0.88
2440	53.26	0.82
2450	45.85	0.28
2460	40.72	-0.17
2470	45.36	0.64
2480	44.99	0.81
2490	51.83	1.87
2500	41.76	0.74

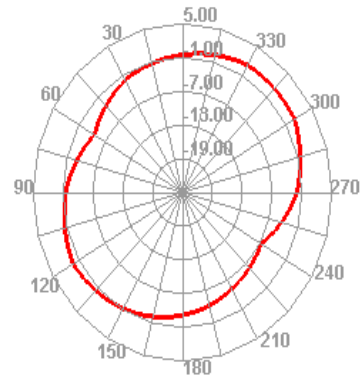
3D 方向图:

3D directional diagram:

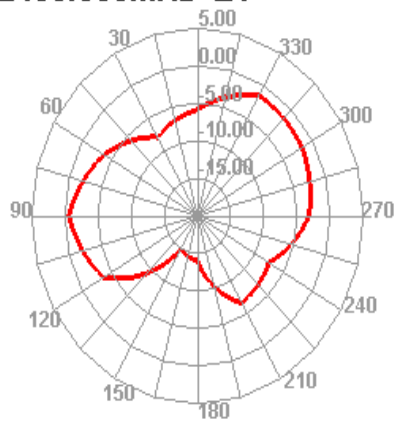
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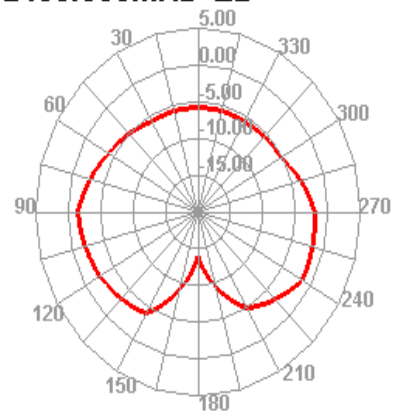
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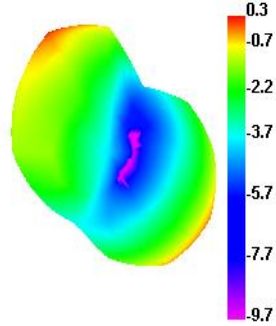
2400.000MHz E1



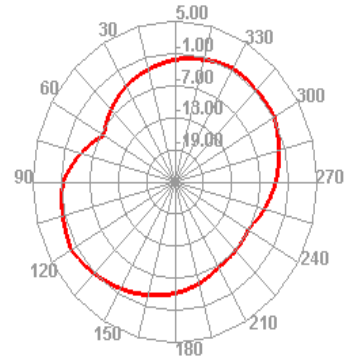
2400.000MHz E2



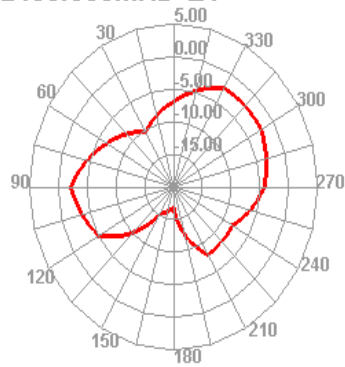
2450.000MHz



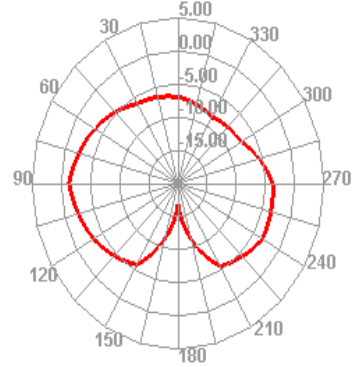
2450.000MHz H



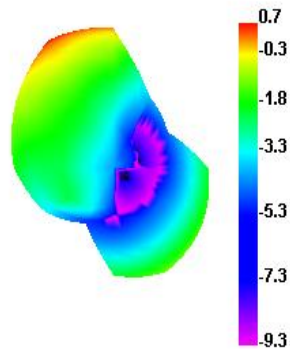
2450.000MHz E1



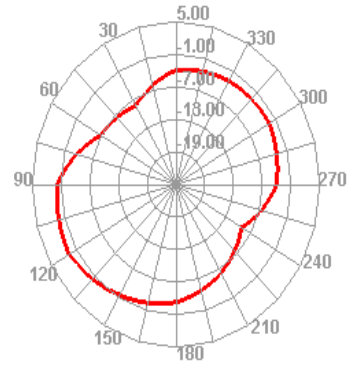
2450.000MHz E2



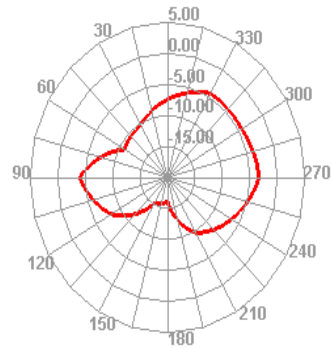
2500.000MHz



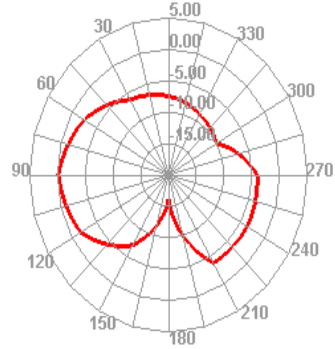
2500.000MHz H



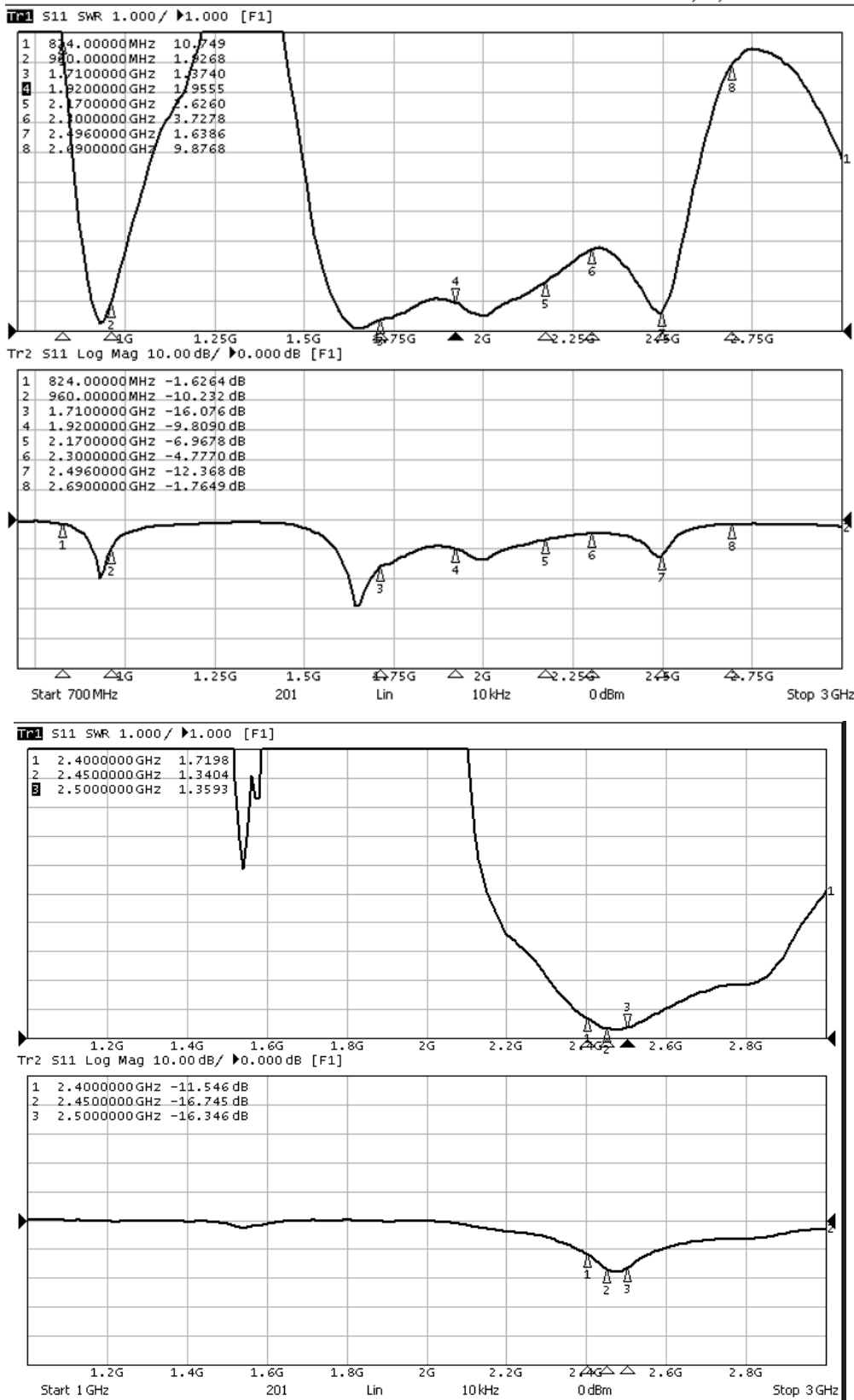
2500.000MHz E1



2500.000MHz E2



无源驻波 SWR



天线装配位置

Antenna assembly position



整机图片

Machine picture

